

U.S. Application No. 10/797,532, filed March 10, 2004

Attorney Docket No. 14883US02

Response dated March 11, 2008

In Response to Notice of Non-Compliant Amendment mailed February 11, 2008

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A communications system, comprising:
a network interface card (NIC) that comprises a host NIC; and
a management device coupled to the host NIC,
wherein the host NIC ~~is adapted to merge~~ merges communications traffic of the
management device and a host with the NIC,
wherein the management device is not coupled to a management device NIC, and
wherein the management NIC and the host NIC are different NICs.
2. (Original) The system according to claim 1, wherein the communications system
provides an integrated management solution.
3. (Currently Amended) The system according to claim 1,
wherein the host NIC is coupled to a network, and
wherein the host NIC comprises a sole connection to the network for the management
device.
4. (Currently Amended) The system according to claim 1, wherein the host NIC
comprises a standard NIC.
5. (Currently Amended) The system according to claim 1, wherein the host NIC
comprises a universal management port (UMP).
6. (Currently Amended) The system according to claim 1, wherein the host NIC

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comprises an Ethernet connection port.

7. (Currently Amended) The system according to claim 1, wherein the host NIC comprises one or more filters and a NIC processor.

8. (Original) The system according to claim 7,
wherein the NIC processor is coupled to a NIC MAC and is coupled to the one or more filters,
wherein the one or more filters are coupled to the NIC MAC, and
wherein the NIC MAC is coupled to a network.

9. (Original) The system according to claim 7,
wherein the NIC processor is coupled to a MAC, and
wherein the MAC is coupled to the management device.

10. (Original) The system according to claim 9, wherein the management device configures the one or more filters.

11. (Original) The system according to claim 9,
wherein the management device sends one or more commands to the NIC processor, and
wherein the NIC processor configures the one or more filters based upon the one or more commands.

12. (Original) The system according to claim 11, wherein the NIC processor responds to a command with a corresponding response to the management device.

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13. (Currently Amended) The system according to claim 12, wherein the host NIC stores only a latest response to a received and expected command.

14. (Original) The system according to claim 12, wherein the command and the corresponding response each comprise an identical sequence number.

15. (Original) The system according to claim 12, wherein the management device stores a particular command until a corresponding response has been received.

16. (Currently Amended) The system according to claim 1, wherein the management device comprises a management processor and a MAC, the management processor being coupled to the MAC, the MAC being coupled to the host NIC.

17. (Currently Amended) The system according to claim 16, wherein the MAC of the management device is coupled to a MAC of the host NIC.

18. (Currently Amended) The system according to claim 1, wherein management traffic, commands and responses are passed between the host NIC and the management device.

19. (Currently Amended) The system according to claim 1, further comprising:
a plurality of additional host NICs, each additional host NIC being coupled to the management device,

wherein if the host NIC fails, then the management device selects a host NIC from the plurality of additional host NICs to exclusively provide access to and from the network for the management device.

20. (Currently Amended) The system according to claim 1,
wherein the host NIC and the management device are part of a server system,
wherein the server system comprises [[a]] the host, system controls and system sensors,
wherein the host NIC and the management device are coupled to the host, and
wherein the management device is coupled to the system controls and the system sensors.

21. (Original) The system according to claim 1, wherein the management device
comprises an intelligent management device.

22. (Currently Amended) A communications system, comprising:
a first host network interface card (NIC) coupled to a network;
a second host NIC coupled to the network; and
a manager coupled to the first NIC and the second NIC, the manager initially being in
two-way communications with the network via the first NIC,
wherein, if the first NIC fails, then the manager switches from the first NIC to the second
NIC and is in two-way communications with the network via the second NIC,
wherein, if the first NIC operates normally, network traffic does not pass through the
manager unless the network traffic is management traffic, and
wherein, if the first NIC fails, the network traffic does not pass through the manager
unless the network traffic is management traffic.

23. (Original) The system according to claim 22, wherein the manager is initially in
two-way communications with the network exclusively through the first NIC.

24. (Original) The system according to claim 22, wherein, if the first NIC fails, then the
manager switches from the first NIC to the second NIC and is in two-way communications with

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the network exclusively through the second NIC.

25. (Original) The system according to claim 22, wherein the first NIC, the second NIC and the manager are part of a server system that is coupled to the network.

26. (Original) The system according to claim 22,
wherein the first NIC comprises a first filter,
wherein the second NIC comprises a second filter, and
wherein the first filter and the second filter are configurable by the manager.

27. (Original) The system according to claim 22, further comprising:
system controls coupled to the manager; and
system sensors coupled to the manager.

28. (Original) The system according to claim 27, wherein the manager monitors the system sensors and reports system alerts over the network.

29. (Original) The system according to claim 27, wherein the manager sets system controls in response to commands received over the network.

30. (Currently Amended) The system according to claim 22, further comprising:
a management console coupled to the network,
wherein the management console receives user input and sends the user input to the manager over the network,
wherein the manager responds to the user input with a response and sends the response to the management console over the network, and

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wherein the response is ~~seemlessly~~ seamlessly output at the management console.

31. (Currently Amended) The system according to claim 30, wherein the management console ~~seemlessly~~ seamlessly provides remote management of the manager.

32. (Original) The system according to claim 22,
wherein the first NIC, the second NIC and the manager are part of a server system,
wherein the server system comprises a host, and
wherein the first NIC, the second NIC and the manager are each coupled to the host via a system interconnect.

33. (Original) The system according to claim 32, wherein the server system comprises a peripheral device that is coupled to the system interconnect.

34. (Original) The system according to claim 32, wherein the server system comprises one or more central processors and a memory, the one or more central processors and the memory are each coupled to the system interconnect.

35. (Original) The system according to claim 32,
wherein the first NIC is coupled to the network via the first switch, and
wherein the second NIC is coupled to the network via a second switch.

36. (Original) The system according to claim 22, wherein the manager comprises an intelligent management device.

37. (Currently Amended) A method for communications, comprising:

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(a) providing access to and from a network for a management device via a host NIC, the management device not being coupled to a management device NIC, the host NIC and the management device NIC being different NICs, the management device only receiving management traffic;

(b) configuring one or more filters of the host NIC via one or more commands generated by the management device;

(c) filtering incoming packets via the one or more filters; and

(d) forwarding the filtered packets based upon one or more matches between information carried by the filtered packets and one or more filtering parameters.

38. (Original) The method according to claim 37, wherein (d) comprises sending the filtered packets to the management device for local processing.

39. (Currently Amended) The method according to claim 37, wherein the incoming packets to the host NIC are forwarded as received if the incoming packets do not carry information matching one or more filtering parameters.

40. (Currently Amended) The method according to claim 37, wherein the incoming packets to the host NIC are forwarded as received if the one or more filters are not properly configured.

41. (Currently Amended) A method of communications between a host NIC and a management device, comprising:

generating a command in the management device, the management device not having a dedicated management NIC, the management device sharing a selected host NIC with a host, the management device not being exposed to general network traffic, the command comprising a particular sequence number;

storing the command in the management device;

sending the command to [[a]] the selected NIC;

executing the command in the selected NIC; and

generating a response to the command, the response comprising the particular sequence number.

42. (Original) The method according to claim 41, further comprising:

sending the response to the management device; and

deleting the stored command comprising the particular sequence number.

43. (Original) The method according to claim 41, wherein executing the command comprises configuring one or more filters of the selected NIC.

44. (Original) The method according to claim 41, further comprising:

storing only latest response to a command comprising an expected sequence number.

45. (Original) The method according to claim 41, further comprising:

storing all outstanding commands in the management device.

46. (Original) The method according to claim 41, further comprising:

resending a particular command if the particular command is still outstanding after a threshold time period.

47. (Original) The method according to claim 41, wherein a command can be re-executed by the selected NIC without an adverse effect.

48. (Original) The method according to claim 41, wherein a command can be re-executed by the selected NIC without exhibiting a modal effect.

49. (Original) The method according to claim 41, further comprising:
providing two-way communications between a network and the management device exclusively through the selected NIC.

50. (Original) The method according to claim 41, wherein the selected NIC is selected from a plurality of NICs.

51. (Currently Amended) A method of remote management over a network, comprising:
accessing the network via a plurality of host network interface cards (NICs) of a local server system;

communicating between a local manager of the local server system and a remote manager over the network through a host NIC selected by the local manager, the selected host NIC being one of the plurality of host NICs, the local manager not having a dedicated management NIC coupled to the network, any of the plurality of host NICs being selectable by the local manager;

managing the local server system via the local manager; and
responding locally to management commands sent over the network from the remote manager.

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52. (Original) The method according to claim 51, further comprising:
sending a response from the local manager to the remote manager.

53. (Original) The method according to claim 52, wherein the sent response comprises graphical information.

54. (Original) The method according to claim 51, wherein the selected NIC provides exclusive access to and from the network for the local manager.

55. (Currently Amended) The method according to claim ~~54~~ 51, wherein the local manager comprises an intelligent management device.

56. (Currently Amended) The method according to claim 51, further comprising:
selecting another host NIC of the plurality of host NICs to provide exclusive access to and from the network for the local manager.